excitement and depression, manio-melancholic insanity. The fourth and fifth cases respectively in a man and in a woman, though presenting a somewhat complicating symptom-complex, are regarded by the author as examples of dementia precox with a periodical course. Only in his second case does he think that the symptoms occurred with sufficient definiteness and regularity, to fulfil the requirements of Hitzig's and Pilcz's classification. On the whole he is inclined to take a position between that of Hitzig and Pilcz, and that of Kraepelin inclining to the opinion of the latter that periodicity alone is not a satisfactory criterion for the separation of psychical diseases.

4. *On the Muscle Sense and Its Representation by Maupassant.*—After a short discussion of the muscle sense, from which our notion of the Ego, or sense of self, is in his opinion, almost entirely derived, the author studies the manifestations of altered self feeling due to the pathological disturbance of this sense as presented by Maupassant, especially in his novel "La Horla," which was written after the gifted Frenchman was doubtless already in the first stage of general paresis.

5. *A Contribution to Idiot Statistics.*—Unsuitable for abstraction.

6. *A Case of Mania of Forensic Interest.*—Case of a man of twenty-six years, arrested for a number of small swindling operations, and found to be suffering from not very well marked mania. Of chief interest is the marked family and hereditary character of the mental trouble, which the author exposes at some length.

7. *Psychiatry Therapy.*—The author calls attention to the skin as an organ of elimination and thinks that a failure of this organ to perform its function may be at the bottom of some psychoses of possibly toxic origin. In a case diagnosed as "periodical neurasthenia" he claims to have been able by the local application of cold, to produce an array of symptoms affecting the skin, the circulatory organs, and sometimes the digestive apparatus, with mental manifestations corresponding closely to those of katatonia, all of which could be made to disappear, by warming up the skin again. From clinical study, and from the above experimental evidence, he urges the advisability of avoiding drugs which tend to produce arterial spasm, caffein especially. The symptoms described he attributes to the production of arterial spasm, the consequent suppression of transpiration through the skin, and urges the rationality of encouraging sweating, and especially of the use of the prolonged warm bath as recommended by Kraepelin and others.

8. *Statistics of Patients in Institutions for the Insane, Idiotic and Epileptic.*—Tabular only. Unsuitable for abstraction.

C. L. Allen (Trenton).

MISCELLANY

Pathogeny of the Acute Psychoses. H. Berger (Berliner klinische Wochenschrift, July 27, 1903).

This is still one of the unsolved problems of psychiatry, and none of the numerous theories advanced have stood the test of experimental trials. The view which has lately met with the most support is that these phenomena depend on delicate chemical changes in the cortical cells, which occur without the production of any morphological alterations in the cells themselves. In this way the theory of a circulating toxin in the blood has gradually gained credence. Experimental proof of this theory has been sought by the author, who made the first trial upon himself. He injected, at intervals, serum, blood and cerebrospinal fluid from a patient suffering from acute dementia with hallucinations, without the least effect. This seems to show that the toxin, if present, must already be firmly united with the cerebral cells before the acute symptoms appear. In the belief that the toxin may have been found during the prodromal stage, the author also injected subcutaneously blood from a patient who was developing symptoms during her puerperium, which later turned out to be a dementia precox. No effect was seen, but blood taken from the same patient four weeks later, during a fresh attack, and injected, was shortly followed by vertigo, and later by cardiac palpitation, cerebral pressure, and a marked feeling of fear. All these symptoms subsided on the following day. A similar experiment with the blood taken from a more advanced case in a condition of stupor at the time, was also followed by results which were much more marked and severe and did not subside for a week. The experiments were then continued on animals, and a basis secured for further investigation in regard to the changes which specific toxins contained in the circulating blood may cause in the central nervous system. The details are not suitable for a brief abstract. They consist mainly of observations made with the serum secured from the goat, which had been made neurotoxic for dogs by the continued subcutaneous injection of triturated cerebrum from the brains of dogs. Intracerebral injections of this goat serum in dogs was followed by well-marked pathological changes in the pyramidal cells of the cerebral cortex and later on a large aggregation of leucocytes around these degenerated cells. Similar pathological conditions have been found in patients afflicted with acute psychoses, and also in other cerebral diseases, but the author is not as yet prepared to draw final conclusions until further proof has been secured.

JELLIFFE.

MORPHINE AND OTHER PHENANTHRENE DERIVATIVES. P. Bergell and R. Pschorr (Zeitschrift f. Physiologische Chemie, Vol. 38, Nos. 1, 2).

It is taught by chemists that morphine is derived from phenanthrene, a cyclic hydrocarbon having the symbol $C_{14}H_{10}$; the basic character of morphine being determined, like that of all other alkaloids, by the presence of nitrogen. According to the authors, all the investigations that have so far sought to attribute the physiological action of morphine to single atomic groups, have been carried out amost entirely upon nitrogenous compounds related to morphine. The authors sought to determine to what extent the physiological action of morphine depends upon non-nitrogenous molecular groups, more particularly phenanthrene and its non-nitrogenous derivatives. They find that phenanthrene itself is inert, but that oxy-phenanthrene, or phenanthrol ($C_{14}H_9OH$) produces in mammals severe tetanic seizures. The position of the hydroxyl group in the molecule has no influence on the physiological effect. Similar symptom-complexes are produced by a carbon- and a sulpho-acid of phenanthrene. No narcotic effect was observed in this entire group. To what extent the effect of phenanthrol may be brought into relation to that of morphine which contains the phenanthrol-complex, and whether the behavior of this class of bodies affords any explanation of the tetanic components of morphine-action—both of these questions the authors consider as still unanswerable. Substantially different from the action of phenanthrol and its carbon-acids, is that of derivatives of phenanthrene-equinone. These substances, both in the test-tube and in the organism, show a decided power of forming methemoglobin, which power is to be attributed to the prepondering influence of the quinone group. None of these compounds produces the above described tetanic state. Epiosin, a methyl derivative of phenanthrene, also produces methemoglobinemia. It is significant that in pigeons, which show an extraordinary resistance toward morphine, severe toxic manifestations are produced by epiosin. Evidently there is some connection between the narcotic and other manifestations of morphine and the methemoglobinemia produced by some of its derivatives.

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